TAPE 1, SIDE 1

Made by Douglas Perham and Erv Rasmussen at the New Almaden Museum, New Almaden, California, June, 1963

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ABSTRACT OF TAPE MADE BY DOUGLAS PERHAM AND ERV RASMUSSEN
June, 1963, at the New Almaden Museum, New Almaden

Tape 1, Side 1

Indicator

1 Early wireless in the U.S. 1898, troop transport coming from Phillipines sent message to station in the Cliff House, San Francisco. 1901, series of stations in Hawaiian Islands. 1901, Marconi's first U.S. station, Nantucket Island. 1905, Marconi station on Mt. Tamalpais.

43 Life story of Douglas Perham. Born in Duarte, Calif. in 1885. Father a teacher and headmaster. High school in Stockton. 1893, World's Fair in Chicago. Visited George Westinghouse and Nikola Tesla. Westinghouse started his collecting career with a lamp and socket. 1898, Perham in Palo Alto. Importing X-ray tubes from Germany. Crookes tube in collection built at Harrison Lamp Works, New Jersey for Thomas Edison. 1902, installed first X-ray on Pacific Coast in doctor's office in Palo Alto. Bought Cashel's Plumbing Company buildings at 913 Emerson Street. He and Joe Baker had spark sets--early hams. 1913 got his commercial license.

185 Story of Cy Elwell and Federal Telegraph Co. Elwell became interested in radio telephony after checking a McCarty radio telephone system for Henshaw Brothers, Oakland lawyers, about 1905. 1903, Valdemar Poulsen arc system. Elwell bought patent rights for U.S. use. David Starr Jordan subscribed $500 for project. 1909, Poulsen Wireless Telephone and Telegraph Co., first communications company in America to use wireless as a medium. Out of this came Wireless Development Co., Federal Telegraph Co., Mackay Radio, IT&T. Doug Perham first employee.

265 1912--De Forest's discovery. Van Etten, Logwood and de Forest, at 913 Emerson, discovered audion tube would oscillate, could be used as a generator of high frequency current. Description of circumstances.

285 Early tubes. Discussion of tubes by de Forest, Perham, Hyde, Moorehead, Cunningham, McCandless. De Forest's first triode was tubular--in the Perham collection.

MARCONI CASE

Indicator

324 Item 1. Marconi loose coupler. Used to receive signals from the Poulsen station.

Item 2. Electrose insulator. Famous, widely used. 1909 used by Dr. Herrold's station.

Item 3. Leyden jars. Crude but efficient condensers from Marconi station. Moskicki condensers an improvement.

Item 4. Stanley AC ammeter. Stanley Kelly Co. produced first polyphase motor after Tesla developed ac motor.

Items 6, 7. Thordarson transformers. About 1915. Started with apparatus for doctors, therapeutic machines. Still in business.

Item 9. 3 Murdock condenser sections. Murdock in Portland only source for amateurs. Prior to this had to make their own with glass plates, tin foil.

Item 10. Whitney Co. ammeter. Whitney one of early companies making ammeters.

Item 11. Transmitting vario coupler. Unknown origin.

Item 12. Marble base changeover switch. No comment.

Item 13. Baldwin headphones. Baldwin & Kolster combined to form Kolster-Baldwin Co. Kolster made radios in old green building, University and County Road, Palo Alto.

Item 16. Two mirror galvanometers. Made by Lord Kelvin in England. Used in early cable receivers.

Item 20. Mercury interrupter. Made in England by Max Levy (?) prior to Oct 12, 1899. Used in place of electrolytic interrupter--thicker spark. A complete description of this (by manufacturer?) is read by Perham.

Item 21. Roller Smith voltmeter. First meter manufacturer to bring down prices within amateur's pocketbook.

Item 22. Magnetic detector. Found by E. S. Pridham who founded Magnavox. Pridham worked with Peter

MARCONI CASE (cont'd)

Indicator

Jensen in Perham's laboratory in Palo Alto. This detector is very early, handmade.

Item 24. Marconi relay. From an elaborate Marconi receiver. First polarized relays to be built with great sensitivity. Used in Western Union and also wireless work.

Item 26. Western Electric tangent galvanometer. Built in great quantity by Western Electric for Western Union. Used extensively by all communications companies.

Item 28. Decade box. Made by Queen & Co., London. Very early.

560 Item 29. Edelman galvanometer. No comment.

Item 30. Spark coils. Originally designed for ignition systems on early single cylinder engines. Taken over by amateurs as source of spark power. McCarty, Herrold started out with spark coils.

Item 32. Marble base key by Picard Co. which later became Wireless Apparatus Co.

Item 33. Two magnetic relay keys. Description of Lafayette Station.

592 Item 36. Frahm frequency meter. German. Perham used one in ac lighting plant. Uses vibrating reed.

END OF TAPE 1, SIDE 1

ABSTRACT OF TAPE MADE BY DOUGLAS PERHAM AND ERV RASMUSSEN
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Tape 1, Side 1 (cont'd)

Indicator

609 Item 37. Marconi speaker. 40-50 years old. Amplified dot and dash signals.

Item 39. Chaffee quenched gap. Made by Telefunken.

Item 41. Leeds Northrup instruments. First American supplier of good devices.

Item 42. Russian condensers. From the Marconi Co.

Item 43. 366 Murdock condenser. Every ham had one.

665 Item 45. Miscellaneous carborundum detectors. Greenleaf W. Pickard was prolific producer, patents on many combinations.

Item 46. EI Company potentiometer. Shown in catalog of 1910. Hugo Gernsback, founder of EI Co, Electro-Importing Co. Also magazines: Electric [illegible] Writer Modern Electrics, Radio News, Electrical Experimenter.

710 Item 53. Electrolytic detectors. Discussion of component parts, manufacture.

Item 54. Miscellaneous crystal holders.

Item 55. Uncle Al's miracle receiver. Still in business in Oakland.

Item 59. Slaby-Arco coherer. Invented by German, Braun, adapted by Slaby-Arco. Used extensively by Marconi. Description of action.

Item 60. Steinite interference eliminator. 1920.

Item 61. Variable Marconi condenser. In brass housing.

789 Item 62. Kolster wavemeters. History of Kolster Co. Kolster radio compass manufactured by Federal Telegraph Co. Dr. Kolster first to build a parabolic reflector. First one here to experiment with short waves.

821 Item 69. One IP receiver and two SE 143 receivers.

Indicator

821 Item 69 (cont'd)

Built in World War I by many manufacturers for the Bureau of Steam Engineering. Designed by Pickard.

852 Letters between Marconi Co. and National Wireless Co. From archives of New Almaden Museum.

893 Story of Dr. Mahlon Loomis. From Perham archives. News story from New York Evening Mail. Mahlon Loomis a dentist who transmitted signals without wires in early 1860's.

973 Story of Dr. Charles Herrold. Told in detail by Perham. 1857-1948. San Jose High School, Stanford. 1909, radio school in San Jose. 1909, first broadcasting station--now KCBS.

and long distance radio telephone events.

149 Letters re Herrold equipment, / National Wireless Telephone and Telegraph Co., Marconi Co. All from Perham archives. Also newspaper clippings. 1913-1915.

446-575 Interview with Mr. Terry Hansen. Early student of Herrold. Ham, navy; commercial license in 1912. (Interview continued on side 2.)

END OF TAPE 1, SIDE 1

Transcriber's notes:

Tape 1, Side 1, item 3 in Marconi case: Perham gives the spelling as Moscicki; other sources give Moskicki.

Tape 1, Side 1, indicator 40, states de Forest stayed in Palo Alto until 1915. His autobiography and letters state he left in May, 1913.